METHOD AND APPARATUS FOR AUTOMATED CORRELATION OF DIGITAL MODULATION IMPAIRMENT

Abstract of the Disclosure

A method and apparatus for automated correlation of digital modulation impairment is described. The technique obtains soft decision data (116, 2502) and extracts signal space location information of sufficient resolution to distinguish different types of impairment to a digitally modulated signal. The technique applies an error vector magnitude mask (117, 502) and determines the signal-to-noise ratio of the digitally modulated signal. The technique applies impairment masks (118, 2504) and provides a characterization (119) of impairment affecting the digitally modulated signal (112). The technique determines a subset of the soft decision data (116, 2502) that falls within the impairment masks (118, 2505) and calculates correlation weights (2506). The technique may be used to identify, isolate, and classify different types of impairment. Given sufficient data collection, sources of impairments may be determined precisely.